Source: *The Business Times,* Singapore Fintech Festival 2017, p6
Date: 13 November 2017

Making the grade

Fintech fever gets schools and training institutions abuzz. BY JAMIE LEE



Ngee Ann Polytechnic's InfoComm Technology lecturer teaching students about Fidor's application programming interfaces in NP's Smart classrooms.

AS SINGAPORE guns for its place as a top fintech hub in the world, there have been steps taken by education and training institutions here to boost the talent pool in this burgeoning field.

The move follows memoranda of understanding signed by the Monetary Authority of Singapore (MAS), the Singapore Fintech Association, and all polytechnics in Singapore, to work on internships, and to build curricula in this space. German digital bank Fidor has also invested S$800,000 to build a fintech curriculum with the Singapore polytechnics.

Ngee Ann Polytechnic is the first polytechnic to launch a digital-banking programme for 38 students from the Diploma in Financial Informatics, as part of the collaboration with Fidor. The polytechnic has also increased the intake size for the diploma from 80 to 100 students.

There has been an increasing trend of students opting for fintech internships with startups and other financial institutions since 2016, the Ngee Ann spokeswoman said. About 20 per cent of third-year Diploma in Banking & Financial Services students who have been on internships since October are taking up fintech positions in organisations such as the MAS, DBS and OCBC. The polytechnic plans to revise the next academic year's curriculum to expose students to fintech and industry developments from the first year.

Not to be left behind, Republic Polytechnic said three students from its School of Infocomm will be embarking on an overseas internship spanning six months at Fidor from October. They are among 30 Republic Polytechnic students doing their internships in fintech-related companies this year, said Wong Wai Ling, director, School of Infocomm, Republic Polytechnic.

At a student competition, which was part of the Singapore FinTech Festival, three of the top five student teams came from Republic Polytechnic, with the teams proposing ideas in micro-transactions payments, and mobile banking services for the visually impaired.

Temasek Polytechnic has updated its curriculum for the Diploma in Financial Business Informatics to better prepare students for fintech skill sets. Students now build skills in financial technologies and operations, lending and payment technologies, fintech entrepreneurship, and data visualisation. Since 2016, an increasing number of students have been taking up internship opportunities at fintech startups and banks with innovation labs in their third year of studies, said Ryan Lim, course manager, Diploma in Financial Business Informatics, School of Informatics & IT, Temasek Polytechnic.

Over at Singapore Polytechnic, students have worked on a slew of projects as part of a holistic approach to education on fintech, said a spokesman. They have designed a cashless payment system for schools, with the system to be used to monitor students' expenditure and dietary habits. They have also designed mobile wallets and a financial analysis app for homebuyers.

The Singapore universities have embraced changes brought on by fintech as well. NUS School of Computing has introduced a new specialisation in financial technology as part of the school's Bachelor of Computing in Information Systems degree programme. It keeps students abreast of industry developments by collaborating with business organisations to develop fintech-related modules. This includes modules on blockchain and distributed ledger technologies as well as agile IT, which are co-developed with the IBM Center for Blockchain Innovation and Standard Chartered Bank, respectively, a spokeswoman said.

REVISING ITS CURRICULUM

Over at Singapore Management University, its School of Information Systems (SIS) has revised its curriculum to emphasise innovative computing and information solutions for business and society. Starting from their third year of study, students under the financial-technology specialisation track will pick up skills such as evaluating digital banking architecture and strategy, and assess the technology implications of large-scale change scenarios such as mergers.

The business schools are also gearing up for the big changes in the financial industry. NUS Business School has introduced a new module on fintech management to enable undergraduates to gain an overview of major technological trends reshaping the financial sector, including payment systems, asset management, and financial intermediation. The school plans to introduce more fintech-related courses in January 2018.

At SMU's Lee Kong Chian School of Business, the school offers a course on financial innovation, which assembles economic theories related to financial innovations, and investigates ongoing innovations as well as important innovations from the past.

"The course trains students in understanding current financial innovation trends in the form of data-based investment, high-frequency trading, securitisation, mobile payments, P2P (peer-to-peer) financing, robo-advisory, financial inclusion and blockchains, as well as gain the required skills in order to explore these fields as entrepreneurs, professionals, or regulators," said the SMU spokeswoman.

There has been an increasing trend of students opting for fintech internships with startups and other financial institutions since 2016, says the Ngee Ann Polytechnic spokeswoman

The push in education extends to the professionals, managers and executives (PMEs) as well.

SMU's SIS has revised its Master of IT in Business (Financial Technology) programme, which blends traditional banking with disruptive financial technologies in the curriculum. Students taking the programme are trained in blockchain, cryptocurrencies, smart contracts, Big Data and development and operations.

CREATING NEW VALUE

The SMU Academy has also been running a three-day course of fintech and innovation that is supported by the Institute of Banking and Finance (IBF). Companies that sponsor the course for participants who are citizens and aged 40 and above, may just pay 10 per cent of the course fee, with the government subsidising the remainder of the fees. The focus is on training participants to understand the design mindset and how it can help to create new value in the financial-services sector, the SMU spokeswoman said.

The academy will launch in November fintech workshops for financial professionals. It will also launch introductory online courses on fintech, blockchain and artificial intelligence on mobile platforms.

Through courses at the NUS Institute of Systems Science (NUS-ISS), more than 1,100 staff from over 30 financial institutions, such as DBS, UOB, and OCBC, have in the last three years developed fintech-related skills. NUS-ISS also plans to introduce fintech-related modular programmes in artificial intelligence and blockchain and distributed ledger technology in 2018.

The Singapore Fintech Association has meanwhile launched the Fintech Talent Programme with The National Trades Union Congress' (NTUC) U Associates in collaboration with Singapore Polytechnic. The three-month course, which began in October, is meant to train PMEs in financial technology.

The syllabus includes lessons on design thinking, Big Data, digital currencies, blockchain, regtech, cybersecurity, cloud computing and the use of application programme interfaces. Over 25 top industry practitioners and lecturers will be providing training sessions, while participants will get access from some 50 mentors in the industry. Participants may also be eligible to get a subsidy off the course fees through NTUC or other government schemes.

leejamie@sph.com.sg
@JamieLeeBT

Source: The Business Times © Singapore Press Holdings Ltd. Permission required for reproduction.